Dry summer a boon for bobwhites

An early spring and below-average rainfall boosted quail nesting efforts for the second year in a row.

JEFFERSON CITY–Formal surveys and informal reports from across Missouri paint an encouraging picture for fans of the bobwhite quail.

The historic drought of 2012 was tough on wildlife species that require abundant water. However, it was a welcome relief for quail and other ground-nesting animals after four wet summers.

"Quail are particularly sensitive to cool, wet conditions during their nesting and brood-rearing period," says Max Alleger, a wildlife ecologist with the Missouri Department of Conservation (MDC). "Newly hatched bobwhites aren't much bigger than bumblebees, and they are extremely vulnerable to getting wet and chilled for the first few weeks of their lives. Cool, wet weather can seriously hamper their nesting efforts."

Alleger says Missouri's quail population took a serious beating from record-breaking rainfall in 2008. The wet, cool springs of 2009 through 2011weren't much better for quail. However, the birds posted respectable gains once the summer of 2011 turned dry, and they built on those gains this year. That recovery got an early boost from an unusually mild winter.

"The winter of 2011-2012 was a non-event compared to what Missouri usually experiences," says Alleger. "Unseasonably warm temperatures and scarce snowfall likely improved quail survival. The mild winter gave way to an early spring, with March 2012 being the warmest on record for Missouri. Plant emergence and development, covey breakup, and nesting all ran about three weeks ahead of normal by most accounts."

That head start allowed quail to raise more chicks earlier. They also got a break in the form of dry weather. The period from March through August was the fourth-driest on record, exceeded only by the Dust Bowl years of 1934 and 1936 and by the drought year of 1988. MDC field staff throughout the state began reporting encouraging signs early in the summer, noting that the drought actually improved quail brood-rearing habitat. The lack of rain prevented the development of dense, matted grass that makes it hard for quail chicks to move around at ground level.

The drought also ensured the availability of areas of bare soil, another important component of quality quail habitat. However, it did not seriously reduce the supply of insects that provide protein-rich food for growing chicks.

Although row crops suffered terribly from lack of rain, Alleger says the effect on quail was minimal.

"Food plots are in poor condition, but scattered, late summer rains produced a flush of ragweed, foxtail and other native annuals, which will provide food resources into winter. And although conservation area managers were unable to conduct prescribed burns this summer, dry conditions allowed them to apply other management practices in areas that have been too wet during recent years."

MDC field staff reported seeing sizeable quail broods early in the season, indicating that initial nesting attempts had succeeded. Later nests may have been more impacted by hot, dry conditions.

These encouraging anecdotal reports were verified by results from surveys MDC conducts each year to gauge quail nesting success. MDC collects information about trends in quail populations and habitat each year. Resource Scientist Beth Emmerich says the birds began nesting activity earlier than usual this year, giving them a running start. Surveys showed the highest number of quail in the western Ozark border and Ozark Plateau regions. The Mississippi Lowlands, which experienced the worst drought in Missouri last summer, had the next-highest quail counts. Northwestern Missouri had the lowest counts.

The full 2011-2002 quail-population status report is available at www.mdc.mo.gov/node/3689.

A continuing concern to quail managers is habitat loss. High crop prices prompted Missouri farmers to take 154,855 acres out of the Conservation Reserve Program (CRP) this year. If the same percentage of land with expiring CRP contracts is put back into row crops in 2013, the two-year loss of habitat will exceed 230,000 acres.

Congress created CRP to prevent erosion of cropland. The original legislation has been augmented to provide wildlife benefits. Withdrawal of land from CRP has direct negative effects on quail and other wildlife.

One bright spot is Missouri recently received an additional allocation of CRP acres. Landowners interested in improving their land for quail and other wildlife can contact any MDC or Natural Resource Conservation Service office. However, no new enrollments will occur until Congress approves a new farm bill.

MDC manages 19 conservation areas (CAs) specifically for quail. Managers rate quail brood-rearing habitat and this year's nesting success as good on these quail emphasis areas (QEAs). However, they rate hunting prospects on QEAs as only fair, because of losses suffered in the previous four years. For a list of QEAs, visit www.mdc.mo.gov/node/3333.

-Jim Low-